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DESCRIPTION OF A NEW MEXICAN PACHYCHEILUS.

BY ANSON A. HINKLEY.

PACHYCHEILUS VALLESENSIS n. sp. Pl. 5, figs. 1-10.

Shell conic, solid, smooth; suture impressed; aperture widely ovate, circular at the base, obtusely angular above, purple within; whorls 7, convex; on young and also well preserved specimens the apical ones are slightly carinate or striate; spire about half the length of the shell.

Operculum corneous, spiral, nucleus subcentral; when viewed from above has a little resemblance to a small *Planorbis*.

Length 32, diam. 16 mm.

Length 33, diam. 19 mm.

Habitat. Valles river, Valles, State of San Luis Potosi, Mexico.

"This species resembles short forms of *P. lævissimus*, from which it differs by the absence of fine spiral lines, the more heavily calloused columellar lip, and the darker interior. No other *Pachycheilus* has been found so far north."¹

The species is named from the river in which it is the most plentiful mollusk. Figure 1 may be considered the type, though its size is above the average. There is often a flattening of the body whorl and occasionally a constriction or shallow groove, as on some of the *Pleurocera*. Mature specimens usually show 6 whorls; when the spire is well preserved, as in fig. 8 and fig. 9, there are 8. In young specimens the aperture is angular below, see fig. 5. In mature

¹ Note from Dr. H. A. Pilsbry. The plate illustrating this species will appear in the next number.

specimens the callous deposit on the columella is heavy, and where it meets the labium above, it is very thick. This is well shown in figs. 3 and 8; within the aperture the outer lip is bordered by a lighter-colored or white zone.

All mature specimens and many of the immature ones are more or less covered with a deposit of calcareous matter, which is often so thick as to mislead as to the form of the shell, see figs. 4 and 9.

Individuals are very numerous in some places, and scattering ones can be found almost anywhere in the river. The very young were found where there was little or no current, on sand or mud bottom, or on roots and plants at the water's edge; older ones were common on rocks or the river bed where the current was strong.

At two places the alluvial soil, though above any indication of high-water, contained large numbers of this species, reminding the writer of the remains of *Tulotoma magnifica* at places along the Coosa river in Alabama.

Figures 8 and 9 are from the stream of a spring, and are more perfect in the spire than those from the river, fig. 8 has the deposit all removed, and fig. 9 has enough removed to show the spire. Fig. 10 is not mature; it will be seen that the heavy columellar callus is not yet formed. Fig. 2 is an extra large one; it and figs. 3 and 7 are more than usually inflated. Much smaller ones were found than the one shown in fig. 5.

DESCRIPTIONS OF NEW MEXICAN LAND SHELLS.

BY HENRY A. PILSBRY.

A full account of the mollusks collected by Mr. A. A. Hinkley in the vicinity of Tampico and in the State of San Luis Potosi will later be submitted by him; meantime some of the new forms are described below.

Polygyra (?) *martensiana* n. sp. Pl. V, figs. 11, 12.

The shell is rather thin, depressed, about the shape of *P. texasiana*, umbilicate, the umbilicus rapidly contracting within; surface glossy, pale brownish-corneous with a faint brown band above the periphery, weakly marked with unequal growth-lines. Upper surface nearly flat, the spire being very low conic; periphery above the middle, the base convex. Whorls $4\frac{1}{2}$ to $5\frac{1}{4}$, convex, slowly increasing, the first